

**AMENDMENTS TO THE CLAIMS**

Claims 1-21 (Canceled).

Claim 22 (Newly Added): A process for producing a nanoelement arrangement, comprising the steps of:

forming a first nanoelement;

covering, with catalyst material for catalyzing growth of nanoelements, the first nanoelement in at least one predetermined region; and

growing at least one second nanoelement on the catalyst material.

Claim 23 (Newly Added): The process according to Claim 22, wherein the catalyst material is applied to the first nanoelement in the form of at least one cluster.

Claim 24 (Newly Added): The process according to Claim 23, wherein the covering step comprises the steps of:

bringing the first nanoelement into operative contact with a suspension having clusters of catalyst material; and

removing the first nanoelement with at least one cluster attached thereto from the suspension.

Claim 25 (Newly Added): The process according to Claim 24, wherein the first nanoelement with the at least one cluster attached thereto is resuspended and is applied to a substrate.

Claim 26 (Newly Added): The process according to Claim 23, wherein the growing step includes growing the at least one second nanoelement on the at least one cluster.

Claim 27 (Newly Added): The process according to Claim 26, wherein the at least one second nanoelement is formed using a chemical vapor deposition process.

Claim 28 (Newly Added): The process according to Claim 22, wherein the catalyst material between the first and the at least one second nanoelement is nickel-plated.

Claim 29 (Newly Added): The process according to Claim 22, further comprising the step of covering a partial region of the first nanoelement with a protective layer which has no catalytic action for the growth of nanoelements.

Claim 30 (Newly Added): The process according to Claim 29, wherein the protective layer used is a resist, surfactant, organic material, oxidized material, or a metal which has no catalytic action for the growth of nanoelements.

Claim 31 (Newly Added): The process according to Claim 22, wherein the catalyst material comprises at least one of iron, cobalt, nickel, and an alloy of these metals with aluminium, titanium, molybdenum and/or platinum.

Claim 32 (Newly Added): A nanoelement arrangement comprising:

a first nanoelement on which at least one predetermined region is covered with catalyst material for catalyzing the growth of nanoelements; and

at least one second nanoelement grown on the catalyst material.

Claim 33 (Newly Added): The nanoelement arrangement according to Claim 32, wherein only a portion of the first nanoelement is covered with catalyst material for catalyzing the growth of nanoelements.

Claim 34 (Newly Added): The nanoelement arrangement according to Claim 32, wherein the first nanoelement is grown in a pore introduced in a substrate.

Claim 35 (Newly Added): The nanoelement arrangement according to Claim 34, wherein the first nanoelement is grown in the pore on a metallization plane in the substrate.

Claim 36 (Newly Added): The nanoelement arrangement according to Claim 32, wherein the first and/or the at least one second nanoelement and/or at least one additional nanoelement are grown on top of one another and/or next to one another.

Claim 37 (Newly Added): The nanoelement arrangement according to Claim 32, wherein the first and/or the at least one second nanoelement includes a nanotube, a bundle of nanotubes, or a nanorod.

